

**REISSUE LITIGATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Reissue Application of: )  
U.S. Patent No. 5,570,338 )  
Mark L. Collins *et al.* ) Group Art Unit: 1634  
)  
Reissue Serial No. 09/533,906 ) Examiner: [Unassigned]  
)  
Reissue Application Filed: March 8, 2000 )  
)  
For: TARGET AND BACKGROUND ) Atty. Docket No. Collins Reissue Protest  
CAPTURE METHODS WITH )  
AMPLIFICATION FOR AFFINITY )  
ASSAYS )

**PROTEST UNDER 37 C.F.R. § 1.291(a)**

**EXHIBIT A**

***Curriculum Vitae of Michael M. Harpold, Ph.D.***

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***Curriculum Vitae***  
**MICHAEL M. HARPOLD, Ph.D.**

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**Education:**

*Postdoctoral, Helen Hay Whitney Fellow, (1976-1979), Molecular Cell Biology Laboratory, The Rockefeller University, New York, NY*  
*Ph.D., 1976, Developmental and Molecular Cell Biology, Tulane University, New Orleans, LA*  
*B.Sc., 1971, Biology, TCU, Fort Worth, TX*

**Professional Experience:**

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*Principal, EnkephaSys, Santa Fe, NM/Tucson, AZ (1999-present)*  
*Chief Scientific Officer and Director, National Center for Genome Resources, Santa Fe, NM (1998-1999)*  
*Vice President, Research, SIBIA Neurosciences (formerly known as The Salk Institute Biotechnology/Industrial Associates, Inc.), La Jolla, CA (1990-1998)*  
*Vice President, Scientific Planning, The Salk Institute Biotechnology/Industrial Associates, Inc., La Jolla, CA (1986-1990)*  
*Director of Scientific Planning and Molecular Biology, The Salk Institute Biotechnology/Industrial Associates, Inc., La Jolla, CA (1982-86)*  
*Senior Staff Scientist, The Salk Institute Biotechnology/Industrial Associates, Inc., La Jolla, CA (1981-82)*  
*Senior Scientist, La Jolla Biological Laboratories, The Salk Institute, La Jolla, CA (1981-1983)*  
*Member, Norris/USC Comprehensive Cancer Center, Los Angeles, CA (1979-1981)*  
*Assistant Professor, Department of Biochemistry, University of Southern California School of Medicine, Los Angeles, CA (1979-1981)*

**Awards/Honors:**

*NIH Graduate Fellowship, The Marine Biological Laboratory, Embryology Course, Woods Hole, MA (1974)*  
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## **University Teaching:**

TCU, 1971

*Teaching Assistant, General Biology Laboratory*

Tulane University, 1972-1974

*Teaching Assistant, Genetics*

*Teaching Assistant, Developmental Biology Laboratory*

*Lecturer, Chemical Embryology*

University of Southern California School of Medicine, 1979-1981

*Proctor, Medical Biochemistry, Year I Discussion Group*

*Lecturer, Genetic Engineering-Medical Biochemistry*

*Lecturer, Graduate General Biochemistry*

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American Cancer Society, Institutional Research Grant, 1980-1981

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Research support for multiple research projects from various corporations, including Phillips Petroleum, Diamond Shamrock, Hoffmann La Roche, Eli Lilly, and Novartis/Ciba-Geigy, 1982-1998

## **Scientific Review:**

*Grants:* NIH Biomedical Sciences Study Section, 1982-1983

*Journals:* Proceedings National Academy of Sciences, USA, J.

Neurochemistry, J. Biological Chemistry, Analytical Biochemistry,

Neuropharmacology, J. Pharmacology and Experimental Therapeutics, J.

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## Publications:

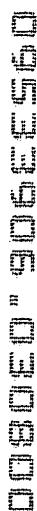
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### Patents:

- (Issued US Patents only; not listed: Filed, unissued US Patents; filed, unissued, or issued foreign patents.)
- S.B. Ellis and M.M. Harpold. (1988) Nucleic acid probes for prenatal sexing. *US Patent* 4769319.
- D.W. Stroman, P.F. Brust, S.B. Ellis, T.R. Gingeras, J.F. Tschopp, and M.M. Harpold. (1989) Methanol inducible genes obtained from *Pichia* and methods of use. *US Patent* 4808537.
- D.W. Stroman, P.F. Brust, S.B. Ellis, T.R. Gingeras, J.F. Tschopp, and M.M. Harpold. (1989) Regulatory region for heterologous gene expression in yeast. *US Patent* 4855231.
- D.W. Stroman, G.T. Sperl, J.M. Cregg, and M.M. Harpold (1989) Transformation of yeasts of the genus *Pichia*. *US Patent* 4879231.
- J.F. Tschopp, M.M. Harpold, J.M. Cregg, and R.G. Buckholz. (1990) Yeast production of hepatitis B surface antigen. *US Patent* 4895800.
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- M.M. Harpold and P.F. Brust. (1995) Assay methods and compositions useful for measuring the transduction of an intracellular signal. *US Patent* 5401629.
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- M.A. Akong, M.M. Harpold, G. Velicelebi, and P. Brust. (1997) Automated analysis equipment and assay method for detecting cell surface protein and/or cytoplasmic receptor function using same. *US Patent* 5670113.
- S.B. Ellis, M.E. Williams, M.M. Harpold, A. Schwartz, and R. Brenner. (1997) Probes and assays for calcium channel alpha 2 subunit-encoding nucleic acids. *US Patent* 5686241.
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